

DETAILED ACTION

1. This Office Action is in response to correspondence filed April 21, 2008 in reference to application 10/525,378. Claims 1-10 are pending and have been examined.

Response to Amendment

2. The amendments filed April 21, 2008 have been accepted and considered in this office action. The Specification and Drawings have been amended. As a results the objections to the Specification and Drawings have been withdrawn. Claims 1-3, 5, and 6 have been amended, and claims 11-14 have been cancelled.

Response to Arguments

3. Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

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A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claim 1 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 16, and 17 of U.S. Patent No.

7,062,442, from hereon "P442," in view of Logan et al (US Patent 6,088,455).

INSTANT APPLICATION	US Patent 7,062,442
CLAIM 1	CLAIMS 1, 16, and 17
A method for receiving media signals through receiving means, said media signals containing unwanted signal components; to choose a representation for said media signals and to process these media signals in such a way that said unwanted signal components are essentially removed and the remaining signal components are saved	A method of identifying segments of media signals received by a receiving device and representing source material whose start and end are not known, storing a first media signal received by the receiving device, the media signal containing both undesirable signal components and said segments of media signals; claim 1. identifying undesirable common segments by activating a second activation member on the device and saving the undesirable

	common segments in a second list; claim 16. excluding the common segments in the second list from the first list; Column 17
from the media signals choosing a first search key representation	selecting a first search key in the first media signal; claim 1
in a search track conduct conducting a first search after determining a signal representation that contains a section which is essentially identical with said first search key representation	searching the media signals for a second search key that is substantially identical to the first search key
comparing a first segment, which lies before and after said search key, with a second segment which lies before and after said section which is essentially identical with the first search key representation	comparing first segments of the first media signal occurring before and after an occurrence of the first search key with second segments of a second media signal occurring before and after an occurrence of the second search key
from said first segment and said second segment find-finding a first common segment	identifying said segments of media signals representing said source material by identifying first common segments between the first segments and the second segments

P442 does not specifically claim:

loading said common segment into a memory domain; and
storing said common segment in said memory domain as a signal representation without unwanted signal components.

However in the same field of removing unwanted signals, Logan teaches loading said common segment into a memory domain (column 9, line 47, known segment stored in memory); and

storing said common segment in said memory domain as a signal representation without unwanted signal components (column 9, line 47, known segment stored in memory. Because known signals are the ones determined by search to be wanted, the unwanted signals are excluded.).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to store matched segments as taught by Logan with the matching system of P442 in order to allow for matched segments to be played to the user (Logan column 10 lines 1-9.).

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-3, 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Logan et al.

8. Consider claim 1, Logan teaches a method for receiving media signals through receiving means, said media signals containing unwanted signal components (column 2 lines 24-39, signals are selected from original signal, signals portions not selected are unwanted); to choose a representation for said media signals and to process these media signals in such a way that said unwanted signal components are essentially removed and the remaining signal components are saved (column 2 lines 24-39, signals are selected from original signal, signals portions not selected are unwanted), said method comprising the steps of:

from the media signals choosing a first search key representation (signal representations are generated column 7 lines 27-30 and 46-49);

in a search track conduct conducting a first search after determining a signal representation that contains a section which is essentially identical with said first search key representation (the comparator 50 searches the data signal representative of the broadcast programming signal for the occurrence of one or more of those known segments by identifying an identification signal stored within the identification signal memory 64 and representative of the known segment; column 8 lines 39-44.);

comparing a first segment, which lies before and after said search key, with a second segment which lies before and after said section which is essentially identical with the first search key representation (a determination is made if an initial portion of a

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segment of a broadcast signal varies from the initial portion of the original version of a known segment; column 9, lines 31 to 38; Figure 2. Correlator 62, upon detecting a match between the data signal in buffer processor 60 and one of the identification signals, can delimit a beginning and end for the segment associated with the respective identification signal; column 9, lines 6 to 26, Figure 2. The playback controller can include a search mechanism that detects marker signals between segments for searching between the stored segments; column 10, lines 35 to 38);

from said first segment and said second segment find-finding a first common segment (comparator can compare the introductory signal to the segment to generate a deviation between the broadcast programming signal and the introduction signal; this allows the apparatus to determine if the initial portion of the segment has been "talked over" by the announcer; column 9, lines 26 to 40. Correlation of plural recorded program segments can be performed to combine the plural signals; column 13, lines 15 to 30. Implicitly, segments not "talked over" are "first common segments".);

loading said common segment into a memory domain (column 9, line 47, known segment stored in memory); and

storing said common segment in said memory domain as a signal representation without unwanted signal components (column 9, line 47, known segment stored in memory. Because known signals are the ones determined by search to be wanted, the unwanted signals are excluded.).

9. Consider claim 2, Logan teaches method according to claim 1, wherein said first search is conducted among media signal representations stored in the memory domain- (figure 2, identification signal memory 64; column 8 line 26.).

10. Consider claim 3, Logan teaches method according to claim 1, wherein if no essentially identical copy of the search key representation was found, carrying out the further step of conducting further searches in the search track to locate essentially identical copies of said search key representations (if not match is found, buffer downloads another segment of the data signal; column 8 lines 54-60.) and, when such a copy is found, conducting a comparison process to find common segments, and continuing this process until a final common segment is achieved or until the process is terminated (see rejection of claim 1, it would be inherent that this process would end when it runs out of segments to process.), and then loading said common segment into the memory domain as a signal representation (column 9, line 47, known segment stored in memory).

11. Consider claim 6, Logan teaches method according to claim 1, wherein the section of a signal representation that lies between two signal representations contained in the memory domain is saved if the setting of the search key was activated during this section (signal representations are generated column 7 lines 27-30 and 46-49. Signals are stored in memory 64.).

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12. Consider claim 7, Logan teaches method according to claim 1, wherein said search track consist of every N:th sample of a signal representation (digital processor 14 selectively controls a digital sample rate for digitizing signals; by selectively controlling the sample rate of the output signal, the digital processor 14 allows the data processor 16 to reduce the file size with an associated loss of fidelity (column 5, lines 44 to 56: Figure 1); implicitly, comparing digital samples that are sampled at a lower sampling rate has the effect of comparing only every nth sample, where n is greater than 1.).

13. Consider claim 8, Logan teaches method according to claim 1, wherein the search tracks, when recorded, are normalized to have a common amplitude and sound level (column 13 lines 8-14 signals are normalized).

14. Consider claim 9, Logan teaches method according to claim 1, wherein the signal representations are selected from one or more of the group consisting of representations of music, talk, noise, jingles and logotypes (column 7 line 30, identification signal can be representative of a song.).

15. Consider claim 10, Logan teaches method according to claim 1, wherein the signal representations are one or more representations selected from the group consisting of music and movies (column 7 line 30, identification signal can be representative of a song).

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Logan in view of Lin et al. (US Patent 7,067,102).

18. Consider claim 4, Logan teaches method according to claim 1, but does specifically teach including the step of removing all redundant signal representations from the search track if the search track contains a multiple of essentially identical signal representations, to thereby achieve a better use of the memory capacity.

In the same field of speech processing and segment recognition, Lin suggests the step of removing all redundant signal representations from the search track if the search track contains a multiple of essentially identical signal representations, to thereby achieve a better use of the memory capacity (column 5, line 64 redundant representations are removed. Although these are HMM matching models, the same principle can apply to the models of Logan)

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to remove redundant models as taught by Lin in the system of Logan in order to conserve memory space in the model storage memory.

19. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Logan in view of Reese (US Patent 4,602,297)

20. Consider claim 5, Logan teaches method according to claim 1, but does not specifically teach wherein a signal representation that lies between two signal representations contained in the memory domain is removed if said signal representation has a time duration that is shorter than a predetermined threshold value.

In the same field of speech recognition Reese suggests a signal representation that lies between two signal representations contained in the memory domain is removed if said signal representation has a time duration that is shorter than a predetermined threshold value (column 2, lines 1-14, Reese discusses time intervals in which the system will react).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to ignore smaller time intervals in order to insure the segments removed are long enough to be unwanted material such as a commercial.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DOUGLAS C. GODBOLD whose telephone number is (571)270-1451. The examiner can normally be reached on Monday-Thursday 7:00am-4:30pm Friday 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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